Claims

[Claim 1]

A glass composition for glass fiber comprising:

SiO_2 in a range of 52.0% by mass or more and 57.5% by mass or less;

B_2O_3 in a range of 19.5% by mass or more and 25.5% by mass or less;

Al_2O_3 in a range of 8.0% by mass or more and 13.0% by mass or less;

MgO in a range of 0% by mass or more and 0.9% by mass or less;

CaO in a range of 0% by mass or more and 6.0% by mass or less;

SrO in a range of 0.5% by mass or more and 6.5% by mass or less; and

TiO_2 in a range of 0.1% by mass or more and 3.0% by mass or less with respect to a total amount, wherein

a ratio of a content of Al_2O_3 (% by mass) to a content of B_2O_3 (% by mass), (Al_2O_3/B_2O_3), is in a range of 0.35 to 0.54, and

a content SI (% by mass) of SiO_2, a content B (% by mass) of B_2O_3, a content M (% by mass) of MgO, a content C (% by mass) of CaO, a content SR (% by mass) of SrO, and a content T (% by mass) of TiO_2 satisfy following formula (1):

$$9.56 \leq 100 \times (B/SI)^2 \times \{SR/(C+SR)\}^{2/3} \times \{T/(M+T)\}^{1/2} \leq 11.35 \quad (1).$$

[Claim 2]

The glass composition for glass fiber according to claim 1, wherein the SI, B, M, C, SR, and T satisfy following formula (4):

$$10.15 \leq 100 \times (B/SI)^2 \times \{SR/(C+SR)\}^{2/3} \times \{T/(M+T)\}^{1/2} \leq 10.85 \quad (4).$$

[Claim 3]

The glass composition for glass fiber according to claim 2, wherein the SI, B, M, C, SR, and T satisfy following formula (5):

$$10.35 \leq 100 \times (B/SI)^2 \times \{SR/(C+SR)\}^{2/3} \times \{T/(M+T)\}^{1/2} \leq 10.78 \quad (5).$$

[Claim 4]

Glass fiber formed from the glass composition for glass fiber according to any one of claims 1 to 3.

[Claim 5]

A glass fiber woven fabric comprising the glass fiber according to claim 4.

[Claim 6]

A glass fiber-reinforced resin composition comprising the glass fiber according to claim 5.